Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of)	
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Spectrum Policy Task Force Seeks Public Comi	ment)	ET Docket No. 02-135
On Issues Related to Commission's Spectrum)	DA 02-1311
Policies)	

REPLY COMMENTS OF THE LAND MOBILE COMMUNICATIONS COUNCIL

The Land Mobile Communications Council ("LMCC"), pursuant to Section 1.415 of the Commission's Rules, 47 C.F.R. § 1.415, hereby respectfully submits its Reply Comments in the above-captioned proceeding.

I. Introduction

LMCC is a non-profit association of organizations representing virtually all users of land mobile radio systems, providers of land mobile services, and manufacturers of land mobile radio equipment. LMCC acts with the consensus, and on behalf, of the vast majority of public safety, business, industrial, private, commercial and land transportation radio users, as well as a diversity of land mobile service providers and equipment manufacturers. Membership includes the following organizations:

Aeronautical Radio, Inc. (ARINC)	
American Association of State Highway and Transportation Officials (AASHTO)	
American Automobile Association (AAA)	
American Mobile Telecommunications Association, Inc. (AMTA)	
American Petroleum Institute (API)	
Association of American Railroads (AAR)	
Association of Public Safety Communications Officials-International, Inc.	
(APCO)	
Central Station Alarm Association (CSAA)	
Forest Industries Telecommunications (FIT)	
Forestry-Conservation Communications Association (FCCA)	
Industrial Telecommunications Association, Inc. (ITA)	
Intelligent Transportation Society of America, Inc. (ITSA)	
International Association of Fire Chiefs (IAFC)	
International Association of Fish and Wildlife Agencies (IAFWA)	
International Municipal Signal Association (IMSA)	
Manufacturers Radio Frequency Advisory Committee (MRFAC)	
National Association of State Foresters (NASF)	
Personal Communications Industry Association (PCIA)	
Taxicab, Limousine & Paratransit Association (TLPA)	
Telecommunications Industry Association (TIA)	
United Telecom Council (UTC)	

II. Background

The FCC's Spectrum Policy Task Force is conducting a review of the Commission's existing spectrum policies with an eye towards making recommendations for possible improvements. By Public Notice¹, the Task Force is seeking comment from interested parties on five different areas: 1.) Market-oriented Allocation and Assignment Policies; 2.) Interference Protection; 3.) Spectral Efficiency; 4.) Public Safety Communications; and 5.) International Issues.

Spectrum is the lifeblood of LMCC's member constituents that operate in the private land mobile radio services (PLMRS) regulated by the Commission. As such, the Commission's

See Spectrum Policy Task Force Seeks Public Comment on Issues Related to Commission's Spectrum

policies that affect that spectrum are of paramount importance to LMCC. The comments contained herein address the stated issues only as they apply to PLMRS spectrum.

III. Market-Oriented Allocation and Assignment Policies

The Notice asks what specific policy and rule changes are needed to migrate from current spectrum allocations to more market-oriented allocations. As LMCC and its individual members have pointed out in the past, market-oriented allocations routinely used for CMRS systems are not appropriate for the private land mobile services.² PLMRS licensees do not operate their systems as a source of revenue but rather as means of supporting the day-to-day needs of their businesses to protect the safety of their employees, customers and the general public, and to increase efficiency and productivity in order to effectively compete in the global marketplace. So while the value that private land mobile licensees place on the spectrum is indeed high, it cannot be quantified or "scored" in the same way as spectrum allocated for commercial The Commission has already acknowledged this fact in the Wireless purposes. Telecommunications Bureau's December 1996 Private Land Mobile Services White Paper which states: "Several times over the last 50 years, the FCC has tried to document in some quantifiable way the value of private wireless services and systems. It is clear such systems contribute to the productivity and efficiency of private users but calculating their impact as a whole has been difficult...... In many cases, the benefits of private systems are realized in ways that are not

Policies, Public Notice, DA 02-1311, (rel. June 6, 2002).

See for example, In the Matter of An Allocation of Spectrum for the Private Land Mobile Services, *Petition for Rulemaking* submitted by the Land Mobile Communications Council, RM-9267, filed April 22, 1998

quantifiable- the saving of a life, the winning of a contract, better internal communication. Yet users have no doubts about their value to the company."³

Likewise, market area designations routinely used for commercial allocations have no relevance to private land mobile licensees. Such predetermined, cookie-cutter geographic areas cannot meet the unique needs of PLMRS users. Private radio systems are designed and licensed for the actual service area which is needed by the user with the type of technology which best suits that user's communications needs. And within the PLMRS user community there is a tremendous variation in the types and sizes of the communications systems needed. For example, industrial users may require the deployment of systems to cover several plants located on one campus. Utilities may require systems covering entire cities or states. Pipelines and railroads may require larger "ribbon" systems that cross state lines but cover no entire states. Site-by-site licensing is the only way to meet the requirements of all these entities and it is imperative that it be preserved.

Even if private licensees were able to successfully compete against well-financed commercial interests and actually win a geographic license at auction, such licensing would only result in inefficient use of the spectrum, since the licensed geographic area outside of the user's actual operating area would not be utilized. Besides having no interest in using their spectrum as a profit-making center, private users generally have neither the staff nor the interest in partitioning or disaggregating spectrum. The current site-by-site licensing process has permitted private users to share spectrum at close distances. It is this sharing and this flexibility which ensures that spectrum is put to its highest and best use.

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³ See Private Land Mobile Services: Background, Staff White Paper, Wireless Telecommunications Bureau, (rel. December 18, 1996).

The Commission has already once declined to adopt geographic licensing for the existing private land mobile bands in WT Docket No. 99-87 wherein it stated: "These channels are heavily congested in most major urban areas, so the number of incumbents, particularly in the areas where geographic overlay licenses would be most desirable, would create nearly impossible due diligence requirements and would make the spectrum, at best, only marginally useful to a geographic area licensee. We believe this militates against geographic overlay licensing of this spectrum." There is no good reason to now reverse that decision.

IV. Spectral Efficiency

The existing PLMR bands are perhaps the most heavily-used of any of the bands regulated by the Commission. There are over 1,000,000 licensed stations and well over 12,000,000 radio transmitters currently operating in the PLMRS. The limited number of channels available combined with a virtually unlimited number of industrial/business, land transportation, and public safety entities that use those channels means that congestion is an unfortunate fact of daily life for those users. So the quest for spectral efficiency resonates strongly within the private land mobile community. In fact, PLMR licensees have spent the past ten years engaged in the Commission's "refarming" process with an end goal of migrating to spectrally efficient narrowband equipment. This process has moved slowly largely because while the Commission has required new equipment to be narrowband type-accepted, there has thus far been no mandate

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See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Service Pool in the Private Mobile Frequencies Below 800 MHz; Petition for Rule Making of the American Mobile Telecommunications Association, WT Docket No. 99-87, FCC 00-403, Report and Order and Further Notice of Proposed Rule Making (rel. November 20, 2000).

for licensees to actually *use* that narrowband equipment.⁵ This market-based approach has proven inadequate to spur widespread migration to more efficient operations. The PLMR bands remain populated by a very significant number of incumbents with working wideband systems, and even many new applicants still request wideband emissions on their applications.

However, the Commission is currently considering in WT Docket No. 99-87 whether forced migration to narrowband operations should be adopted.⁶ LMCC believes the single most important action the Commission can take to promote spectral efficiency in the PLMR bands is to immediately adopt an order that mandates 12.5 kHz narrowband (or equivalent) operations by a date certain.⁷ Without such an order, there remains little motivation for incumbent licensees to make the economic investment in new narrowband equipment.

The Commission is also currently considering the last issue arising from the refarming proceeding- the LMCC Low Power Proposal, which will also have an important effect on spectrum efficiency in the land mobile bands. LMCC first submitted its Low Power Proposal to the Commission in June, 1997.⁸ In June, 2000 the FCC partially adopted the proposal but declined to adopt the rest without benefit of a full rulemaking proceeding.⁹ That proceeding, WT

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See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Services and Modify the Policies Governing Them, and Examination of Exclusivity and Frequency Assignment Policies of the Private Land Mobile Radio Services, PR Docket No. 92-235, FCC 95-255, Report and Order and Further Notice of Proposed Rule Making, (rel. June 23, 1995).

See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended; Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies; Establishment of Public Service Pool in the Private Mobile Frequencies Below 800 MHz; Petition for Rule Making of the American Mobile Telecommunications Association, WT Docket No. 99-87, FCC 00-403, Report and Order and Further Notice of Proposed Rule Making (rel. November 20, 2000).

The Association of American Railroads (AAR) does not support adoption of a date-certain for conversion to narrowband technology for the railroad industry for the reasons set forth in AAR's Comments filed March 5, 2001, in WT Docket No. 99-87.

See LMCC letter to Mr. Dan Phythyon, Acting Chief, Wireless Telecommunications Bureau, June 4, 1997.
 See Wireless Telecommunications Bureau Accepts LMCC Low Power Plan for Part 90 450-470 MHz
 Band, Public Notice, DA 00-1359 (rel. June 29, 2000).

Docket No.01-146,¹⁰ was initiated on July 24, 2001 and the comment period closed on November 13, 2001. Issuance of an order in this rulemaking will not only finally conclude the extended refarming proceeding, but also provide licensees and applicants with the regulatory certainty needed to encourage them to purchase new narrowband equipment in advance of any date certain the Commission may adopt. But until this takes place, the transition to spectral efficiency will be hindered.

The Commission should also undertake a study of efficiency-based licensing criteria to determine whether there are any mechanisms, including loading or usage requirements, which should be implemented to ensure that spectrum is used efficiently.

V. Public Safety Communications

A number of LMCC's public safety members have filed separate comments addressing the specific concerns of state and local government public safety licensees. Those members include the Association of Public-Safety Communications Officials (APCO), as well as the International Association of Fire Chiefs (IAFC) and the International Municipal Signal Association (IMSA), which filed joint comments in response to the inquiry. In addition, other LMCC members including the American Petroleum Institute (API), the Association of American Railroads (AAR), and the United Telecom Council (UTC), have also filed separate comments describing the spectrum requirements of their mission critical applications. LMCC refers the Task Force to all of those comments.

See Amendment of Part 90 of the Commission's Rules and Policies for Applications and Licensing of Low Power Operations in the Private Land Mobile Radio 450-470 MHz Band, WT Docket No. 01-146, RM-9966, FCC

VI. Private Wireless Spectrum Allocation Needed

LMCC urges the Commission to include private wireless in future spectrum allocations under whatever policies are adopted as a result of this inquiry. The last time the private wireless services received a dedicated spectrum allocation was way back in 1986 with the release of the 896-901 MHz/935-940 MHz bands.¹¹ The private services need more spectrum not only for new services and to accommodate future growth of traditional services, but also because the PMRS spectrum shortage has been aggravated by regulatory changes. More than once in recent years PMRS spectrum has been reallocated for CMRS services and slated for auction.

In 1991, a portion of the 220-222 MHz band was allocated by the FCC for "non-commercial" nationwide land mobile radio systems. This new band presented the opportunity for new and innovative PMRS applications. However, these innovative applications never got the chance to develop because the FCC never acted on the PMRS applications that were filed for this spectrum. Finally, in 1997 the FCC decided to eliminate the "non-commercial" set-aside, to return the applications filed in 1991, and to hold auctions for these channels among new applicants.¹²

In the 800 MHz band, PMRS systems have had a major presence since the band was first allocated and assigned in the 1970's. However, in PR Docket No. 93-144, the Commission began the process of introducing geographic licensing to the CMRS services in the 800 MHz

^{01-199,} Notice of Proposed Rule Making, (rel. July 24, 2001).

See Amendment of Parts 2, 15, and 90 of the Commission's Rules and Regulations to Allocate Frequencies in the 900 MHz Reserve Band for Private Land Mobile Use, GEN Docket No. 84-1233, RM-4829, FCC 86-333, Report and Order (rel. September 26, 1986).

See Amendment of Part 90 of the Commission's Rules to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, PR Docket No. 89-552, RM-8506, *Third Report and Order* (rel. March 12, 1997).

band.¹³ Initially the Commission split the band between CMRS geographic licensees and PMRS site-by-site licensees. However, in the *Second Report and Order* in this proceeding the Commission decided to make the site-by-site channels available via auction for geographic licensing.¹⁴ The inevitable result of this decision is that all future access to these channels is and will be limited to large CMRS auction winners.

The need for more PLMRS spectrum was most recently clearly and convincingly documented in LMCC's 1998 Petition for Rulemaking, which even included specific band recommendations for the Commission to consider.¹⁵ That need has not abated in the five years since that petition was filed. As the Commission begins to allocate spectrum under its new policies, it should ensure that the private wireless services are not ignored.

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See Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, PR Docket No. 93-144, First Report and Order, (1995).

¹⁴ Ibid. Second Report and Order, (rel. July 10, 1997).

See In the Matter of An Allocation of Spectrum for the Private Land Mobile Services, *Petition for Rulemaking* submitted by the Land Mobile Communications Council, RM-9267, filed April 22, 1998.

VII. Conclusion

WHEREFORE, the premises considered, it is respectfully requested that the Commission act in accordance with the views expressed herein.

Respectfully Submitted,

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